

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A telephone apparatus, comprising:
a transceiver that communicates with a central station;
a plurality of desksets; and
an interface bus that permits said desksets to communicate with said transceiver by exchanging packets with the transceiver, each packet including source, destination and error checking information.
2. (Previously Presented) The apparatus of claim 1, each packet comprising:
an address (ADDR) byte that includes source and destination addresses of the packet;
a command (CMD) byte;
an argument (ARG); and
a block check character (BCC) for error checking.
3. (Original) The apparatus of claim 2, wherein said BCC is produced by a longitudinal parity check.
4. (Original) The apparatus of claim 2, wherein said BCC is produced by a cyclic redundancy check.
5. (Original) The apparatus of claim 2, wherein each packet further comprises a start of header (SOH) byte that indicates the start of the packet.
6. (Original) The apparatus of claim 1, wherein said interface bus comprises a pair of conductors.

7. (Original) The apparatus of claim 1, wherein said interface bus comprises an unshielded twisted pair.

8. (Original) The apparatus of claim 1, wherein said interface bus comprises an EIA-485 interface.

9. (Original) The apparatus of claim 1, wherein a media access layer of said interface bus is carrier sense multiple access with collision detect.

10. (Previously Presented) In a communication system having a plurality of terminals connected to a common node by a digital interface bus, a method for handling error control for packets sent to the terminals by the common node, each packet having modulo-sequential sequence numbers, comprising the steps of:

sending a packet from the common node to one of the terminals;

performing collision checking on the bus; and

sending a negative acknowledgment (NAK) from said one of the terminals to the common node when an error or unexpected sequence number is detected in said packet, wherein said NAK includes a sequence number of a last valid packet received.

11. (Currently Amended) The method of claim 10, further comprising the step of re-sending any lost packets from the common node to said one of the terminals when the unexpected sequence number is detected.

12. (Original) The method of claim 10, further comprising the step of sending a reboot command from the common node to said one of the terminals when the number of missed packets exceeds a predetermined threshold.

13. (Original) The method of claim 10, further comprising the step of sending a reboot command from the common node to said one of the terminals when a NAK is received at the common node from said one of the terminals.

14. (Previously Presented) The method of claim 10, further comprising the steps of:

determining that a current packet is new when a sequence number in the current packet is one greater than a sequence number in a previous packet;

determining that the current packet is repeated when the sequence number in the current packet equals the sequence number in the previous packet;

determining that the current packet is repeated when the sequence number in the current packet is N less than the sequence number in the previous packet, where N is a predetermined threshold; and

detecting a bad sequence number otherwise.

15. (Original) The method of claim 10, further comprising the step of detecting an error based on a block check character in said one of the packets.

16. (Original) The method of claim 10, further comprising the step of detecting an error when a predetermined period elapses between receipt of successive characters in said one of the packets.

17. (Previously Presented) The method of claim 10, wherein the collision checking is based on a different pre-assigned time-out period for each terminal.

18. (Previously Presented) The telephone apparatus of claim 1, wherein each deskset has a different pre-assigned time-out period.

19. (New) The method of claim 1, wherein source information included in each packet identifies a given deskset among that the plurality of desksets that is sending the packet.

20. (New) The method of claim 1, wherein each of the plurality of desksets exchanging packets with the transceiver is configured to send data to the transceiver in a different manner from each other deskset based on an associated address of the deskset.

21. (New) The method of claim 20, wherein the associated address of each deskset defines a different time-out period related to access of the interface bus by a corresponding deskset.

22. (New) A common node in a communication system, the common node connected to a plurality of terminals by a digital interface bus; the common node configured to handle error control for packets sent to the terminals, each packet having modulo-sequential sequence numbers, comprising:

means for sending a packet to one of the terminals;

means for performing collision checking on the bus; and

means for receiving a negative acknowledgment (NAK) from said one of the terminals if an error or unexpected sequence number is detected in said packet, wherein said NAK includes a sequence number of a last valid packet received.